

WHAT IS CLAIMED IS:

1. A process for the formation of a coating on at least a portion of a plastic substrate, characterized in that it is carried out at a temperature at least equal to the maximum temperature of use of the coated substrate minus 20°C.
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2. The process as claimed in claim 1, characterized in that it employs a plasma CVD.
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3. The process as claimed in claim 1 or 2, characterized in that it is carried out at a temperature at least equal to the maximum temperature of use of the coated substrate.
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4. The process as claimed in one of the preceding claims, characterized in that it is carried out at a temperature below the temperature at which the plastic weakens.
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5. The process as claimed in one of the preceding claims, characterized in that it is carried out at a temperature as close as possible to the temperature at which the plastic weakens.
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6. The process as claimed in one of the preceding claims, characterized in that it employs cooling means.
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7. The process as claimed in one of the preceding claims, characterized in that the coating is formed in several stages.
- 35 8. The process as claimed in one of the preceding claims, characterized in that it comprises the operations consisting successively in
 - a) stabilizing the substrate to be coated at a temperature at least equal to its maximum

- temperature of use minus 20°C,
- b) forming the coating while taking care that the temperature of the substrate does not reach the temperature at which the plastic weakens,
- 5 c) carrying out operations a) and b) again, if necessary, according to the thickness and other characteristics desired for the coating.
9. The process as claimed in one of the preceding
10 claims, characterized in that the substrate is made of polycarbonate and in that the process is carried out at a temperature at least equal to 120°C.
- 15 10. A product comprising a plastic substrate provided with a coating formed as claimed in the process of one of claims 1 to 9, characterized in that the mean thickness of the coating is at least 2 µm, preferably at least 4 µm and in particular at
20 least 6 µm.
11. The application of the product as claimed in claim 10 as plastic component of the following types: vehicle body part, vent or the like,
25 window, in particular for a ground, sea or air vehicle, in particular for a motor vehicle, window for the construction industry or street furniture, safety window for a helmet or window of the type requiring resistance to heat.